



Naval Medical Research and Development

Enterprise Laboratories

[Home](#)[Enterprise](#)[Laboratories](#)[Collaboration](#)[News & Media](#)[Research](#)[Resources](#)

News Releases

Collaboration, Research and Development Leads to Acquisition Excellence Award for Fielding of a Device

Released: 12/2/2016

From Naval Medical Research Center Public Affairs



(Nov. 3, 2016) U.S. Navy Sailors with the Expeditionary Medical Unit - Gulf, treat a simulated casualty during a coalition base response drill at Qayyarah West Airfield, Iraq. Readiness drills provide Coalition forces with opportunities to assess their preparation and response time as they work to advise and assist the Iraqi security forces during Operation Inherent Resolve. Coalition forces operate out of the Qayyarah West Airfield where they advise and assist the Iraqi security forces as they fight to retake territory from the Islamic State of Iraq and the Levant. (U.S. Army photo by 1st Lt. Daniel Johnson/Released) (Photo from navy.mil)

SILVER SPRING, Md – Competition, affordability, technical expertise, innovative techniques, and professional acumen are keys to excellence for acquisition activities. Once a year, outstanding contributions made by military and civil service individuals and teams dedicated to enhancing competition and innovation throughout the Navy and Marine Corps are honored and recognized.

The 2016 Acquisition Excellence Award Ceremony took place November 17 at the Pentagon, and was attended by the Under Secretary of the Navy, Dr. Janine Davidson, and the Assistant Secretary of the Navy (Research, Development and Acquisition), the Honorable Sean J. Stackley, and various awardees.

Among the team awardees was Christian Miller, Lieutenant Commander, Naval Medical Research Center (NMRC), for his work at the Marine Corps Combat Development Command (MCCDC) with Marine Corps Systems Command (MCSC) in the development of a field device capable of detecting Traumatic Brain Injury (TBI), non-invasively. The device, known today as the Infrascanner 2000, is capable of detecting subdermal, epidural, and intracerebral hematomas by gauging different pressure changes.

TBI is a serious health concern for deployed service members. “On deployment it’s very common

News Releases

NMRC Researcher Shares Results from Traveler’s Diarrhea Treatment Trial

Collaboration, Research and Development Leads to Acquisition Excellence Award for Fielding of a Device

NAMRU-2 Scientists Highlight Ongoing Dengue Research in Cambodia at ASTMH

NAMRU-6 Researcher Shows What Next Generation Sequencing Technologies Can Do

NMRC-A Researchers Collaborate with Malaysian Partners to Better Understand the Threat of MERS

The Mosquito Fighters, Part IX: Klamath Falls and the Navy's Forgotten Filariasis Problem

NAMRU-2 Researcher Presents Rare Case study of Dengue Infection at ASTMH 2016

NMRC and WRAIR Work Together to Fight Dengue Virus

Beyond the Battlefield: Using Research to Improve Wounded Warrior Care and Quality of Life

NAMRU-3 Researchers Contributed to the Influenza Vaccination Selection for 2016

R & D Chronicles - The Mosquito Fighters, Part VIII: Malaria Control in the Pacific War

Deputy Assistant Secretary of Defense for Research Visits NHRC

Lightening the Load: The Science Behind Finding the Balance Between Combat Load, Survivability, Health, and Performance

NAMRU-3 Change of Command Ceremony Highlights the Importance of Collaboration

Rear Adm. Chinn, Defense Health Agency’s Director of Research

for blasts to go off, and sometimes there is no way to tell how close a person was to the blast, and depending on the individual, they can react in different ways,” said Miller. “In 2012, there was a push to create a device capable of detecting TBI – here you have the warfighter who has a serious need, and a need to be able to provide a quick answer and turnaround,” he continued.

Without the Infrascanner, the guidelines for detecting TBI included taking all warfighters who were within 50 feet of the blast off duty for 24 hours, having them examined by the health care team, and putting them on observation for signs of brain injury.

“The problem with that is that when you have a small unit and you take a warfighter out of service for watch or injury, it greatly diminishes the capabilities of the team and hurts morale,” said Miller.

Miller was the requirements and capabilities officer who managed the Family of Field Medicine Equipment at MCCDC when MCSC put out calls for projects. From writing the original capabilities document, developing the fielding plan and finding funding, Miller had a great impact on the early conception of the device.

A true team effort, Miller said, “I had the pleasure of working on the early development of the device with Dr. Keith Prusaczyk, Director of Acquisition, Program Management and Research Support Services at NMRC [SIC], and his team.” Over a period of two years, Dr. Prusaczyk and his team were able to take the early thoughts about the device and begin to make it a reality.

“The development of the Infrascanner is a nice example of when things go really right,” said Miller.

He went on to explain, “When an initial proposal requests go out, all that you’re asked is to attempt to find a solution to whatever the warfighter’s problem may be – in the case of the Infrascanner, there were a ton of initial thoughts about what it needed to be to maximize its capability, for example, it needed to be portable and capable of being used by whoever is treating [SIC] the patient.”

Since its fielding, the device has been cleared by the Federal Drug Administration (FDA), and over 200 Infrascanners have been deployed to all United States Marine Corps (USMC) Battalion Aid Stations as part of their standard trauma kit.

Miller left MCCDC in May of last year, but was still included as part of the team award as his original work didn’t change and was part of the initial development process.

Infrascanner was not the only project MCCDC, MCSC and NMRC have collaborated on, Miller and Prusaczyk have worked on various developments together including freeze dried plasma for major injuries and blood flow, to the Mobile Oxygen Ventilation and External Suction (MOVES), and Mobile Oxygen Ventilation and External Suction Superior Logistics Capable (MOVES SLC).

Miller added, “I think this award highlights when warfighter needs can be combined with research and transition to advanced product development and on to final fielding.”

The Advanced Medical Development program at NMRC coordinates the business and scientific research of advanced medical devices and their development through the project life cycle.

[Development and Acquisition Visits
NAMRU-Dayton](#)

[NAMRU San Antonio Research Produces
Platform for Next Generation
Antimicrobial Wound Dressing](#)

[U.S. Army and Navy Forces Collaborate
with African Partners in the Fight
against Malaria](#)

[NMRC and WRAIR Team Up to Launch
Joint West Africa Research Group in
Nigeria](#)

[R&D Chronicles: The Mosquito Fighters,
Part VII - The Inimitable Dr. Stitt and
the Navy Medical School](#)

[NAMRU San Antonio Participates in
First Local Bioscience Research
Database Website](#)